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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/651,039	08/29/2003	Katsuo Iwata	008312-0305620	8506

909 7590 05/24/2006

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EXAMINER
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GOMA, TAWFIK A

ART UNIT	PAPER NUMBER
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2627

DATE MAILED: 05/24/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 10/651,039	<b>Applicant(s)</b> IWATA ET AL.	
	<b>Examiner</b> Tawfik Goma	<b>Art Unit</b> 2627	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-10 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-3 and 6-8 is/are rejected.
- 7) ☒ Claim(s) 4,5 and 8-10 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 August 2003 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \* c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. ____. |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)  | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date ____. | 6) <input type="checkbox"/> Other: ____.  |

## **DETAILED ACTION**

### ***Priority***

Receipt is acknowledged of papers submitted under 35 U.S.C. 119(a)-(d), which papers have been placed of record in the file.

### ***Drawings***

The drawings are objected to under 37 CFR 1.83(a) because they fail to show "branching portion" as described in the specification. Any structural detail that is essential for a proper understanding of the disclosed invention should be shown in the drawing. MPEP § 608.02(d). Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required

corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

For the purposes of examination, the "branching portion" will be interpreted to refer to the beam splitter 230.

***Claim Rejections - 35 USC § 102***

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 2, 6 and 7 are rejected under 35 U.S.C. 102(b) as being anticipated by Teragaki (JP 2000106943).

Regarding claims 1 and 6, Teragaki discloses an optical head comprising a light source which performs recording and/or playback of the information on the optical disc (1, figs. 17, 23), an object lens which focuses the light ray emitted from the light source to the information recording layer through the light transparent layer of the optical disc (6, figs. 17, 23), a branching portion which branches reflected luminous flux from the optical disc to between the light source and the object lens (12, fig. 23 and 3, fig. 17), a detection lens which focuses the light ray branched by the branching portion (14, fig. 23), and a light receiving portion which receives light ray and generates a light intensity signal according to the intensity of the received light ray (9, figs. 17, 22), wherein the light source has plural light-emitting parts which each output light ray of a different wavelength (1A, 1B, figs. 17, 22); and an optional light-emitting part among the light-

emitting parts is arranged, so that the optical axis of the output light ray is located on the optical axis of the optical system (2, fig. 17, and 12 fig. 23).

Further regarding claim 6, Teragaki discloses an optical disc apparatus (10, figs. 17 and 23) comprising a laser drive circuit which outputs light with a predetermined wavelength from an optional light-emitting part of the optical head (100, figs. 17 and 24); a signal processor which plays information recorded on the recording medium (9, figs. 17 and 23 and par. 54 lines 1-5), based on the signal output from the photo-detector of the optical head (9 and par. 53 page 11 lines 20-26). Teragaki is silent on a motor which rotates the recording medium at a predetermined speed but it is inherent that the apparatus of Teragaki uses a motor to rotate the disk at a predetermined speed in order to perform recording/reproduction operations properly.

Regarding claims 2 and 7, Teragaki further discloses wherein said plurality of light-emitting parts of the light source are stacked in series to the vertical direction of the active layers which include light-emitting points; and the light-emitting points are arranged in series close to each other by the control of the active layer thickness (1A, 1B, figs. 17 and 22).

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 3 and 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Teragaki (JP 2000105943) in view of Tateno et al (JP 2002025104).

Regarding claims 3 and 8, Teragaki discloses everything claimed as applied above. Teragaki further discloses wherein a blue laser light used for next-generation DVD's will be used (pars. 5 and 6). Teragaki fails to disclose the structure of the 3 wavelength lights that can be used in the apparatus. In the same field of endeavor, Tateno discloses an optical head wherein said plurality of light-emitting parts of the light source include a monolithic 2-wavelength laser element (5a, 5b, Drawing 7) and a semiconductor laser element which can output a blue laser beam (5c, Drawing 7); and active layer of the semiconductor laser element are stacked in the direction vertical to the face direction of active layer of the monolithic 2-wavelength laser element (Drawing 7). The active layer 4b of the blue laser light is stacked vertically with respect to the face direction (6a, 6b direction) of the monolithic 2-wavelength laser element. It would have been obvious to one of ordinary skill in the art to modify the light emitting part of Teragaki by providing a blue laser as taught by Tateno. The rationale is as follows: One of ordinary skill in the art would have been motivated to provide a blue laser light in the light source taught by Teragaki in order to enable reproduction of a next generation DVD (see Teragaki pars. 5 and 6).

***Allowable Subject Matter***

Claims 4, 5, 9 and 10 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Claims 4, 5, 9 and 10 are allowable over the prior art of record because the closest prior art including US Patent (6188132) by Shih et al and Japanese Patent (JP 2002-025104), considered individually or in combination fail to disclose or fairly teach an optical head with a light emitting part that outputs three wavelengths of light, including the combination wherein the distance between the light emitting points are set according to the criteria set in the claims.

**Contact Information**


Please note that art unit 2653 is now workgroup 2627.


Any inquiry concerning this communication or earlier communications from the examiner should be directed to Tawfik Goma whose telephone number is (571) 272-4206. The examiner can normally be reached on 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, William Korzuch can be reached on (571) 272-7589. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 2627

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
T. Goma  
5/12/2006

  
THANG V. TRAN  
PRIMARY EXAMINER